

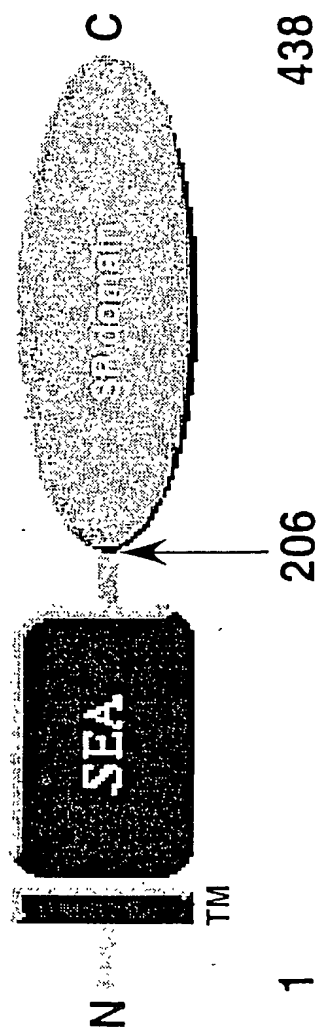
HELLER EHRMAN WHITE & MCAULIFFE LLP

Sheet 1 of 4

Title: NUCLEIC ACID MOLECULES ENCODING A  
TRANSMEMBRANE SERINE PROTEASE 7, THE  
ENCODED POLYPEPTIDES AND METHODS BASED  
THEREON

Docket No.: 24745-1613, Edwin Madison, *et al*  
Filed: March 13, 2002

# Domain organization and amino acid sequence of MTSP7



10 20 30 40 50 60  
MMYTPVEFSEAEFSRAEYQRKQFWDVRLALFTLAIVAIIGIAGIVTHFWEDDKSFY  
70 80 90 100 110 120  
YLASFVNTIKYKENYGIRSSREFIERSHQIERMMSRIFRHSSVGGRFIKSHVIKLSPE  
130 140 150 160 170 180  
QGV DILIVLIFRYPSTDSAEQIKKKIEKALYQSLTKQLSLTINKPSFRLTPIDSKKMRN  
190 200 210 220 230 240  
LLNSRCGIRMTSSNMPLPASSSTQRIVQGRETAMEGEWPQASLQLIGSGHQCGASLISN  
250 260 270 280 290 300  
TWLLTAAHCFWKNKDPTQWIATFGATITPPAVKRNVRKIILHENYHRETNDIALVQLS  
310 320 330 340 350 360  
TGVEFSNIVQVRVCLPDSSIKLPPKTSVFVTGFGSIVDDGPIQNTLRQARVETISTDVCNR  
370 380 390 400 410 420  
KDVYDGLITPGMLCAGFMEGKIDACKGDSGGPLVYDNHDIWYIVGIVSWGQSCALPKKPG  
430  
VYTRVTKYRDWIASKTGM\*

↓ = protease cleavage site

10099700 031302

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Sheet 2 of 4

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MTSP7/full length cDNA sequence Range: 1 to 2100

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      10      20      30      40      50      60
AGATCAGATGGCGACTGAATAGAAAGCTGCCCCAGTCCTGGGTTTCATGATGTACACACCTG
TCTAGTCTACCGCTGACTTATCTTCGACGGGGTCAGGACCCAAGTACTACATGTGTGGAC

      70      80      90     100     110     120
TTGAATTTTTCAGAAGCTGAATTCTCAGGAGCTGAATATCAAAGAAAGCAGCAATTTTGGG
AACTTAAAGTCTTCGACTTAAGAGTGCTCGACTTATAGTTTCTTTCGTCTTAAACCC

      130     140     150     160     170     180
ACTCAGTACGGCTAGCTCTTTTCACATTAGCAATTGTAGCAATCATAGGAATTGCAATTG
TGAGTCATGCCGATCGAGAAAAGTGAATCGTTAACATCGTTAGTATCCTTAACGTTAAC

      190     200     210     220     230     240
GTATTGTTACTCATTTTGTGTTGAGGATGATAAGTCTTTCTATTACCTTGCCTCTTTTA
CATAACAATGAGTAAACAACAACCTCTACTATTTCAGAAAGATAATGGAACGGAGAAAAAT

      250     260     270     280     290     300
AAGTCACAAATATCAAATATAAAGAAAATTATGGCATAAGATCTTCAAGAGAGTTTATAG
TTCAGTGTATATAGTTTATATTTCTTTTAATACCGTATTCTAGAAGTTCTCTCAAATATC

      310     320     330     340     350     360
AAAGGAGTCATCAGATTGAAAGAATGATGTCTAGGATATTTTCGACATTCTTCTGTAGGCG
TTTCTCAGTAGTCTAACTTTCTTACTACAGATCCTATAAAGCTGTAAGAAGACATCCGC

      370     380     390     400     410     420
GTCCGATTTATCAAATCTCATGTTATCAAATTAAGTCCAGATGAACAAGGTGTGGATATTC
CAGCTAAATAGTTTAGAGTACAATAGTTTAATTCAGGTCTACTTGTTCACACCTATAAG

      430     440     450     460     470     480
TTATAGTGCTCATATTTTCGATACCCATCTACTGATAGTGCTGAACAAATCAAGAAAAAAA
AATATCACGAGTATAAAGCTATGGGTAGATGACTATCACGACTTGTTAGTTCTTTT

      490     500     510     520     530     540
TTGAAAAGGCTTTATATCAAAGTTTGAAGACCAACAATTGTCTTTGACCATAAACAAC
AACTTTTCCGAAATATAGTTTCAAACCTCTGGTTTGTAAACAGAACTGGTATTTGTTG

      550     560     570     580     590     600
CATCATTTAGACTCACACCTATTGACAGCAAAAAGATGAGGAATCTTCTCAACAGTCGCT
GTAGTAAATCTGAGTGTGGATAACTGTCGTTTTTCTACTCCTTAGAAGAGTTGTCAGCGA

      610     620     630     640     650     660
GTGGAATAAGGATGACATCTTCAAACATGCCATTACCAGCATCCTCTTCTACTCAAAGAA
CACCTTATTCTACTGTAGAAGTTGTACGGTAATGGTCGTAGGAGAAGATGAGTTTCTT

      670     680     690     700     710     720
TTGTCCAAGGAAGGAAACAGCTATGGAAGGGGAATGGCCATGGCAGGCCAGCCTCCAGC
AACAGGTTCCCTTCCCTTTGTGATACCTTCCCCTTACCGGTACCGTCCGGTCGGAGGTCG

      730     740     750     760     770     780
TCATAGGGTCAGGCCATCAGTGTGGAGCCAGCCTCATCAGTAACACATGGCTGCTCACAG
AGTATCCCAGTCCGGTAGTCACACCTCGGTCTGGAGTAGTCATTGTGTACCGACGAGTGTC

      790     800     810     820     830     840
CAGCTCACTGCTTTTGGAAAAATAAAGACCCAACTCAATGGATTGCTACTTTTGGTGCAA
GTCGAGTGACGAAAACCTTTTATTTCTGGGTGAGTTACCTAACGATGAAAACCACGTT

      850     860     870     880     890     900
CTATAACACCACCCGCTGAAACGAAATGTGAGGAAAAATTATTCTTCATGAGAATTACC
GATATTGTGGTGGGCGTCACTTTTGCTTACACTCCTTTAATAAGAAGTACTCTTAATGG

      910     920     930     940     950     960
ATAGAGAAAACAAATGAAAATGACATTGCTTTGGTTTCAGCTCTCTACTGGAGTTGAGTTT
TATCTCTTTGTTTACTTTTACTGTAACGAAACCAAGTCGAGAGATGACCTCAACTCAAAA
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970 980 990 1000 1010 1020  
CAAATATAGTCCAGAGAGTTTGCTCCAGACTCATCTATAAAGTTGCCACCTAAAACAA  
GTTTATATCAGGTCTCTCAAACGGAGGGTCTGAGTAGATATTTCAACGGTGGATTTTGTT

1030 1040 1050 1060 1070 1080  
GTGTGTTTCGTACAGGATTTGGATCCATTGTAGATGATGGACCTATACAAAATACACTTC  
CACACAAGCAGTGTCTAAACCTAGGTAACATCTACTACCTGGATATGTTTTATGTGAAG

1090 1100 1110 1120 1130 1140  
GGCAAGCCAGAGTGGAAACCATAAGCACTGATGTGTGTAACAGAAAGGATGTGTATGATG  
CCGTTTCGGTCTCACCTTTGGTATTTCGTGACTACACACATTGTCTTTCCTACACATACTAC

1150 1160 1170 1180 1190 1200  
GCCTGATAACTCCAGGAATGTTATGTGCTGGATTCATGGAAGGAAAAATAGATGCATGTA  
CGGACTATTGAGGTCCTTACAATACACGACCTAAGTACCTTCCTTTTATCTACGTACAT

1210 1220 1230 1240 1250 1260  
AGGAGATTCTGGTGGACCTCTGGTTTATGATAATCATGACATCTGGTACATTGTAGGTA  
TCCCTCTAAGACCACCTGGAGACCAAATACTATTAGTACTGTAGACCATGTAACATCCAT

1270 1280 1290 1300 1310 1320  
TAGTAAGTTGGGGACAATCATGTGCACTTCCCAAAAAACCTGGAGTCTACACCAGAGTAA  
ATCATTCAACCCCTGTTAGTACACGTGAAGGGTTTTTTGGACCTCAGATGTGGTCTCATT

1330 1340 1350 1360 1370 1380  
CTAAGTATCGAGATTGGATTGCCTCAAAGACTGGTATGTAGTGTGGATTGTCCATGAGTT  
GATTCATAGCTCTAACCTAACGGAGTTTCTGACCATACATCACACCTAACAGGTACTCAA

1390 1400 1410 1420 1430 1440  
ATACACATGGCACACAGAGCTGATACTCCTGCGTATTTTGTATTGTTAAATTCAATTAC  
TATGTGTACCGTGTGTCTCGACTATGAGGACGCATAAAACATAACAAATTTAAGTAAATG

1450 1460 1470 1480 1490 1500  
TTTGGATTAGTGCTTTTGCTAGATGTCAAGAAGCCCTTCAGACCCAGACAAATCTAATAT  
AAACCTAATCACGAAAACGATCTACAGTTCTTCGGGAAGTCTGGGTCTGTTTAGATTATA

1510 1520 1530 1540 1550 1560  
CCTGAGGTGGCCTTTACATACGTAGGACCAAACCTCTCTACCATGAGGGAAGAAGACAC  
GGACTCCACCGGAAATGTATGCATCCTGGTTTGGGAGAGATGGTACTCCCTTCTTCTGTG

1570 1580 1590 1600 1610 1620  
AGCAAATGACAGACAGCACCTATTCCCTTACTCACAAGGGAAACTGCTTGTGATACTTCCT  
TCGTTTACTGTCTGTCTGGATAAGGAATGAGTGTTCCTTTGACGAACACTATGAAGGA

1630 1640 1650 1660 1670 1680  
AATAAGATAAAATAAGTGGTTTCCCTCAATTGAAGACAGGAACATCATTTTCCACAGGATA  
TTATTCTATTTATTACCAAAGGGAGTTAACTTCTGTCTTGTAGTAAAAGGTGTCCTAT

1690 1700 1710 1720 1730 1740  
TGAAGAGCTGCCAGTAATGCCAAAATCTTACCTCATATAATACCTGGAGCATGTGAGATT  
ACTTCTCGACGGTCATTACGGTTTTAGAAATGGAGTATATTATGGACCTCGTACACTCTAA

1750 1760 1770 1780 1790 1800  
CTTCTAGTGAAAAAGAACAGTCTTCCCTGAAGACTCAGGGCTTCAACATTCTAGAAGTGA  
GAAGATCACTTTTTCTTGTCAGAAGGGACTTCTGAGTCCCGAAGTTGTAAGATCTTGACT

1810 1820 1830 1840 1850 1860  
TAAGTGGACCTTTCAGTGTCCAAGAATGGAGAAGCATGGGATTTGCATTATGACTTGAAGT  
ATTACCTGGAAGTCACACGTTCTTACCTCTTCGTACCCTAAACGTAATACTGAAGTTGA

1870 1880 1890 1900 1910 1920  
GGGCTTATATCTAATAATACAGAGCACTATCACTAACCTCAACAGTTGACATTTTAAAG  
CCCGAATATAGATTATTATGTCTCGTGATAGTGATTGGAGTTGTCAACTGTAAAATTTTC

1930 1940 1950 1960 1970 1980  
TTTTTAAATGTATCTGAACTTGCTGTTAACACAGTGTTATAACTCAAGCACTAGCTTCAG  
AAAAATTTACATAGACTTGAACGACAATTGTGTCACAATATTGAGTTCGTGATCGAAGTC  
  
1990 2000 2010 2020 2030 2040  
GAAGCATGTTGTGTTGTTAAGAAGCTTTTCTGATTTATTCTTTAACAGCATCTTGCCATC  
CTTCGTACAACACAACAATTCTTCGAAAAGACTAAATAAGAAATTGTCGTAGAACGGTAG  
  
2050 2060 2070 2080 2090 2100  
TATATGTTAGTAGCAGTTGGCCCAGAAAGGACAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
ATATAAATCATCGTCAACCGGGTCTTTCCTGTTTTTTTTTTTTTTTTTTTTTTTTTTT